

## American Mathematical Society Educational Activities

The American Mathematical Society (AMS) represents approximately 28,000 mathematicians, and its outreach efforts emphasize the importance of research mathematics to science and society. Its members provide much of the mathematical preparation for mathematically intensive professions, from physics and engineering, to economics and school mathematics teaching. The quality of this instruction affects not only the future of the mathematics profession, but of the whole scientific enterprise, and the American workforce.

The AMS membership is kept informed about developments in mathematics education, and engaged with various educational initiatives, through its Committee on Education (chaired by Roger Howe, Yale University), its Washington Office (directed by Sam Rankin), its Public Awareness Program (directed by Mike Breen), and through extensive programs at the annual national meetings. Following is a sampling of some of this AMS activity.

1. The AMS invests in the future of the mathematical research community by supporting **Young Scholars Programs** that provide a crucial first experience in mathematics for talented and enthusiastic high school students who attend summer programs. It provides modest grants to such programs totaling approximately \$80,000 annually, and awarded on a competitive basis. The **Epsilon Fund** will endow the Society's support of these summer research programs in the future.
2. The annual **Arnold Ross Lecture**, held at a science museum or center, gives high school students the chance to meet and to hear prominent mathematicians talk about their first experience in mathematics and research.
3. One of the activities of the Public Awareness Program has the Public Awareness Officer appear as a guest speaker in local classrooms to host a competitive **"Who Wants To Be A Mathematician"** game, which travels around the country and involves students from local high schools in an entertaining competition.
4. The **annual meeting** of the Society (held jointly with the Mathematical Association of America) includes numerous events directly related to K-12 education, specifically aimed at college and university faculty who are involved (or who want to become involved). In recent years, this has included an address by the president of the National Council of Teachers of Mathematics (NCTM).
5. The **Committee on Education** (COE) maintains regular contact with national initiatives in mathematics education. The annual meeting of the COE features a number of representatives from projects and agencies in Washington that are involved with ongoing efforts to improve K-12 education. Because chairs of mathematics departments are also included, this meeting is an ideal forum for connecting the research and education communities. The COE also provides feedback to other organizations on various documents and reports, such as the recent "Mathematics Education of Teachers" report from the Conference Board of the Mathematical Sciences, the report of the RAND Mathematics Panel on education research, and the Principles and Standards for School Mathematics of the NCTM. The COE has also provided advice on the NAEP 2004 Framework, rewriting portions of the introductory material for the subject areas.
6. The Society is currently contemplating further ways to involve mathematicians from the research community in K-12 education in appropriate ways. It proposes to develop a formal program, **MIME** ("mathematicians in mathematics education"), of professional development workshops for research mathematicians to promote a better understanding of the major issues in K-12 education and to provide a basis for professional consultation to projects that are addressing these issues.